Mathematics, Grade 3, Scoring Guide

A1A3

Which number would go next in this pattern?

1, 8, 1, 2, 8, 2, 3, 8, 3, _____

A. 2

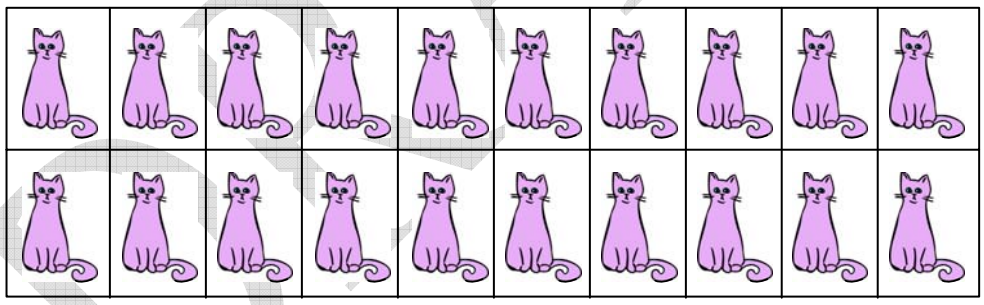
B. 3

C. 4*

D. 5

A2A3

Look at the rows of cats below. Which number sentence matches the total number of cats in the rows?



A. $4 \times 10 = 40$

B. 1 x 20 = 20

C. $2 \times 10 = 20$*

D. $2 \times 11 = 22$

A1B3

What is the missing number in the table?

In Number	3	5	7	9
Out Number	6	8	10	

A. 9

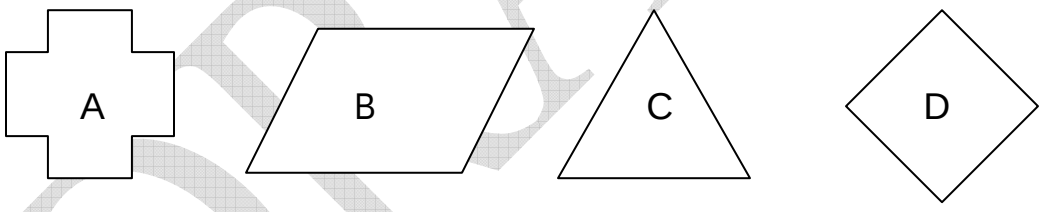
B. 10

C. 11

D. 12*

G3C3

Which two shapes have four lines of symmetry?



A. A and B

B. B and C

C. C and D

D. A and D*

A4A3

Last week, Bill's plant was 3 inches tall. This week it is 7 inches tall. Which describes the growth of Bill's plant?

A. Bill's plant has grown 3 inches since last week.

B. Bill's plant has grown 4 inches since last week.*

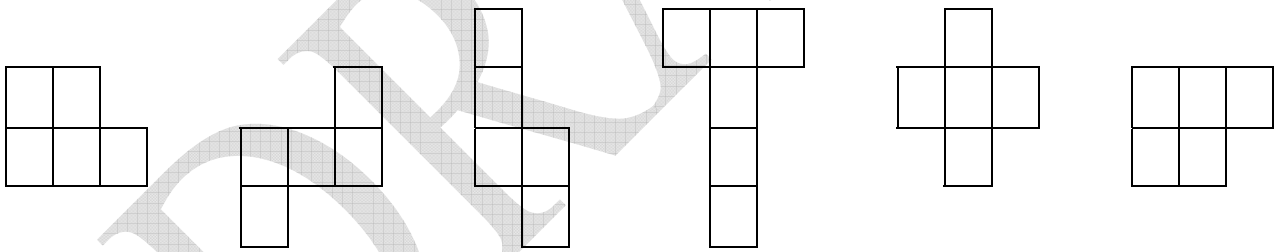
C. Bill's plant has grown 7 inches since last week.

D. Bill's plant has grown 10 inches since last week.

G3A3

Which two shapes are congruent?

Shape A Shape B Shape C Shape D Shape E Shape F



A. C and D

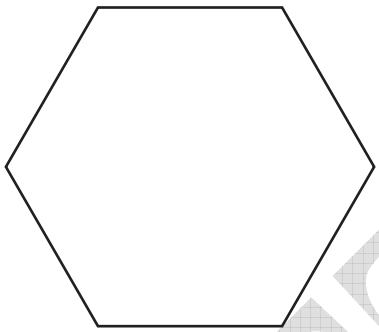
B. B and C

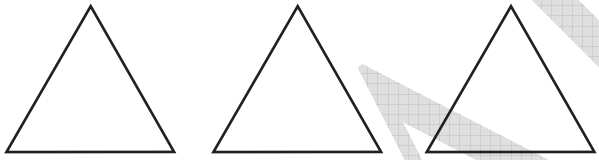
C. A and F*

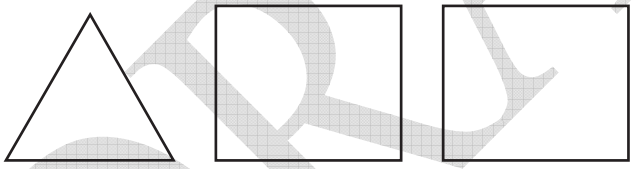
D. D and F

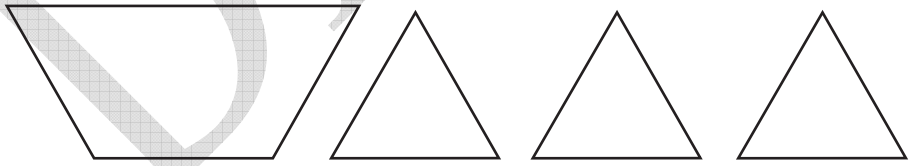
G1C3

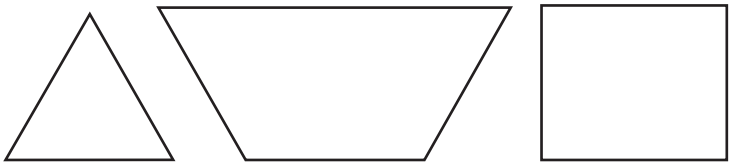
Which group of shapes, when put together without overlapping, will make this shape?



A. 

B. 

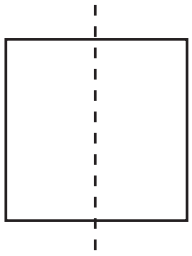
C.  *

D. 

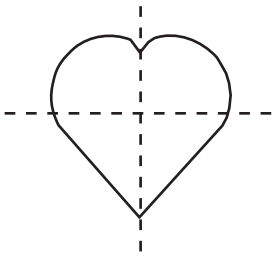
G3C3

Choose the shape that only shows **all** of the lines of symmetry.

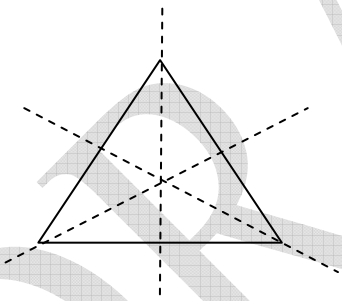
A.



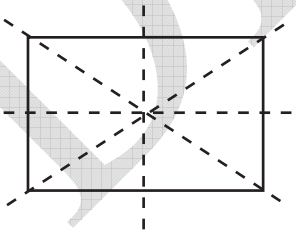
B.



C. *



D.



A2A3

Ten students were on the playground. All but six of them were

on the swings. Which number sentence shows how many students were on the swings?

A. 10 + 6 = 16

B. 16 – 6 = 10

C. 10 – 6 = 4*

D. 10 + 4 = 14

A3A3

Bob and Beth each have the same kind of candy. They are trying to decide who has the most candy. Bob has arranged his pieces into 3 groups of 5 pieces each. Beth has arranged her candy into 5 groups of 3 pieces each.

Draw a picture to show each student's arrangement.

Bob's candy arrangement

Beth's candy arrangement

Do Bob and Beth have the same or a different amount of candy?

Scoring guide:

2 points – Correctly draws 3 x 5 and 5 x 3 representations **and** indicates the *same* amount of candy.

1 point – Correctly drawings **or** indicates *same* amount of candy.

0 points – Other.

A3A3

The third grade students will go on boat rides. Each boat can carry up to 3 students. Complete the chart putting 3 students in each boat.

Number of Boats	1	2	3	4	5	6	7
Number of Students	3	6		12			

If there are 26 students in the class, how many boats will be needed so that all students in the class can ride in a boat?

Show your work in this space.

Number of boats needed for 26 students: _____

Scoring guide:

2 points – Correctly completes chart (9, 15, 18, 21)**and** has correct number of 9 boats
1 point – Correctly completes chart **or** has correct number of 9 boats
0 points – Other

A1B3

The third grade class created a Number Machine that changes the number that is put in to a different number when it comes out. Complete the table with the last two Out Numbers.

IN	5	7	8	9	10
OUT	14	16	17		

Write the rule that explains how this Number Machine works:

_____

Scoring guide:

2 points – Correctly completes chart (18, 19) **and** has correct rule for Machine (IN+ 9).
1 point – Correctly completes chart (18, 19) **or** has correct rule for Machine (IN + 9)
0 points – Other

A2B3

Fill in the blanks to show the commutative property of addition.

_____ + 8 = 8 + _____

Write another equation that shows the commutative property of addition:

_____

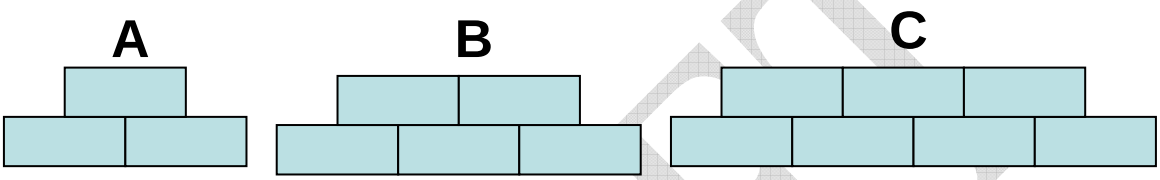
Scoring guide:

2 points – Both examples of the commutative property are correct **and** the second equation is different from the first.

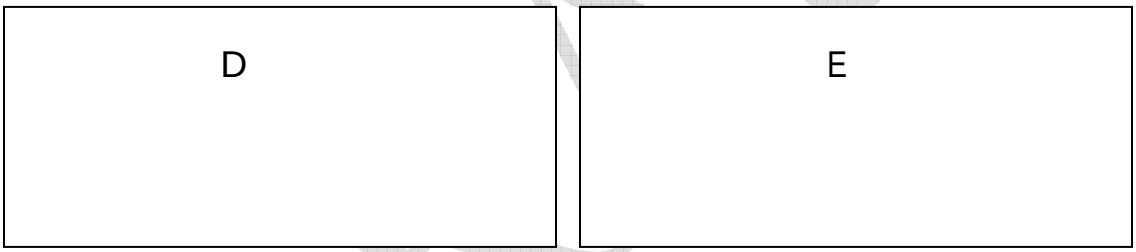
1 point – One example of the commutative property is correct.
0 points – Other.
Exemplary responses: any number will work in the blanks as long as the same number is in both blanks; the second equation must use the same numbers on both sides of the equation but in a different order.

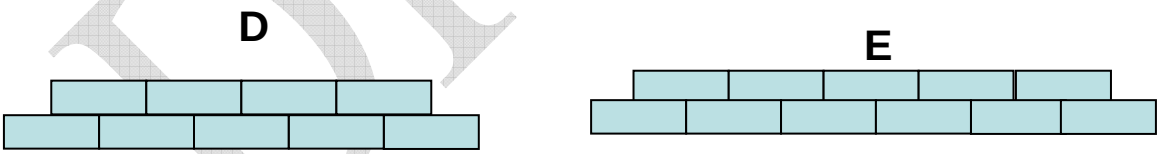
A1A3

Mrs. Jason put the following shape pattern on the board.



Draw the next two figures in the pattern:





Describe this pattern:

2 points – Correctly extends the pattern (shown above) **and** includes an acceptable pattern description (add 1 rectangle to the top and bottom row each time; start with three add 1 rectangle to the top and bottom row each time, etc.)
1 point – Correctly extends the pattern (shown above) **or** includes an acceptable pattern description (add 1 rectangle to the top and bottom row each time; start with three add 1 rectangle to the top and bottom row each time, etc.)
0 points – Other